

AMENDMENTS TO THE CLAIMS

1-3. (Cancelled)

4. (Previously Presented) A method for screening for compounds that promote binding of estrogen related receptor ligand 1 (ERRL1) to estrogen related receptor (ERR), which method comprises:

- (1) contacting cultured cells with a candidate compound, wherein said cultured cells express ERRL1 and ERR;
- (2) measuring the binding of ERRL1 to ERR in the presence of the candidate compound and in a control sample in the absence of said candidate compound;
- (3) identifying the candidate compound promoting binding of ERRL1 to ERR as compared to said control sample.

5. (Previously Presented) The method of claim 4, wherein the cultured cells are obtained from an established human or non-human cell line; from tissue of a human or non-human animal body and appropriately maintained in a culture condition.

6. (Previously Presented) The method of claim 5, wherein the cultured cells are obtained from cells selected from the group consisting of: (1) adipocyte cells, (2) yeast cells; (3) bacterial cells; (4) cells transfected with ERRL1 cDNA and/or ERR cDNA; and (5) isolated animal cells, such as BAT, heart, skeletal muscle, or kidney, in which ERRL1 protein is highly expressed.

7. (Currently Amended) A method for screening for compounds that increase the activity of estrogen related receptor (ERR) for expressing a medium-chain acyl CoA dehydrogenase (MCAD) gene, which method comprises:

- (1) contacting a test sample of cultured cells with a candidate compound, wherein said cultured cells express ERR;
- (2) contacting a control sample of said cultured cells with estrogen related receptor ligand 1 (ERRL1) and without the candidate compound;

(2)(3) measuring the activity of ERR for expressing the MCAD gene in the presence of the candidate compound test sample and in the control sample; and

(3)(4) identifying wherein the candidate compound increasing the activity for expressing the MCAD gene ~~to the level the same as~~ to the same level as or a higher level than the control sample is a compound that increases the activity of estrogen related receptor (ERR) for expressing a medium-chain acyl CoA dehydrogenase (MCAD) gene ~~action of ERRL1 to ERR.~~

8. (Previously Presented) The method of claim 7, wherein the cultured cells are obtained from an established human or non-human cell line; from tissue of a human or non-human animal body and appropriately maintained in a culture condition.

9. (Previously Presented) The method of claim 8, wherein the cultured cells are obtained from cells selected from the group consisting of: (1) adipocyte cells, (2) yeast cells; (3) bacterial cells; (4) cells transfected with ERRL1 cDNA and/or ERR cDNA; and (5) isolated animal cells, such as BAT, heart, skeletal muscle, or kidney, in which ERRL1 protein is highly expressed.